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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/711,942	10/14/2004	JEFFREY A. CLARK	88453-004	5941

31861 7590 08/16/2006

DYKEMA GOSSETT PLLC
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ANN ARBOR, MI 48104

EXAMINER

KRAMER, DEAN J

ART UNIT	PAPER NUMBER
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3652

DATE MAILED: 08/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/711,942	CLARK ET AL.	
	Examiner	Art Unit	
	Dean J. Kramer	3652	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-10 and 13-20 is/are rejected.
- 7) ☒ Claim(s) 11 and 12 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1-4, 6, and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cantrill (3,498,663) in view of Pearson (5,387,068).

Cantrill shows an air-powered vacuum tool comprising removable interface plates (30) each having a dedicated vacuum port (40,42) associated therewith and a plurality of vacuum ports (35) along each plate segment (see Fig. 3). The Cantrill patent does not specifically disclose a vacuum generator provided for each port (40,42).

However, Pearson shows it old and well known to separately provide an individual vacuum generator (44) for each area of vacuum desired. This provision of multiple generators allows a vacuum force to be selectively created at desired locations along the tool to efficiently handle work pieces of varying shapes and sizes.

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a separate vacuum generator for each vacuum port (40,42) of Cantrill's tool as taught by Pearson so that only those ports needed for engaging certain sized articles could be actuated thereby saving energy.

4. Claims 5, 8, 9, and 13-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cantrill in view of Pearson as applied to claims 1-4, 6, and 7 above, and further in view of Conboy (3,933,388).

Conboy shows a suction hoisting tool comprising a venturi-type vacuum generator that can also function to provide positive air pressure to blow off a work piece when position at a desired location.

It would have been obvious to provide a venturi-type blow off valve on the modified Cantrill assembly presented supra as taught by Conboy so that a gripped work piece could be accurately dropped off at a precise location.

In regard to claims 19 and 20, the resulting tool could obviously handle various articles including certain sized cartons and containers.

5. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cantrill in view of Pearson and Conboy as applied to claim 8 above, and further in view of Anderson (5,024,575).

Anderson shows a plurality of air-powered outboard stabilizers (45) for providing support in addition to the vacuum force of its pick-up tool.

It would have been obvious to a person having ordinary skill in the art to provide at least two outboard stabilizers on the modified Cantrill device, as was presented above in section 4, similar to those shown in the Anderson patent in order to stabilize an array of goods prior to depositing the array into a package or the like.

Allowable Subject Matter

6. Claims 11 and 12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Each of the remaining cited references shows an air-powered vacuum tool having a plurality of vacuum ports and pick-up orifices.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dean J. Kramer whose telephone number is (571) 272-6926. The examiner can normally be reached on Mon., Tues., Thurs., Fri..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eileen Lillis can be reached on (571) 272-6928. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3652

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

A handwritten signature in black ink, appearing to read "Dean J. Kramer", followed by the date "8/8/06".

Dean J Kramer
Primary Examiner
Art Unit 3652

djk
8/8/06